

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P800811/WO/1	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/006155	International filing date (day/month/year) 12 June 2003 (12.06.2003)	Priority date (day/month/year) 24 June 2002 (24.06.2002)
International Patent Classification (IPC) or national classification and IPC B62D 1/18		
Applicant DAIMLERCHRYSLER AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.	
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.	
<input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).	
These annexes consist of a total of <u>2</u> sheets.	
3. This report contains indications relating to the following items:	
I	<input checked="" type="checkbox"/> Basis of the report
II	<input type="checkbox"/> Priority
III	<input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
IV	<input type="checkbox"/> Lack of unity of invention
V	<input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
VI	<input type="checkbox"/> Certain documents cited
VII	<input type="checkbox"/> Certain defects in the international application
VIII	<input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 05 November 2003 (05.11.2003)	Date of completion of this report 14 July 2004 (14.07.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/006155

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages _____ 1-7 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____ 1-7 _____, filed with the letter of _____ 30 June 2004 (30.06.2004)
- ☒ the drawings:
 pages _____ 1/2-2/2 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/06155

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 7	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 7	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 7	YES
	Claims		NO

2. Citations and explanations

Independent claim 1

1. Novelty and inventive step

Document GB-A-2 282 433, which is considered the closest prior art, discloses a steering column comprising a steering spindle that supports a steering wheel and is connected to a steering shaft, the connection between the steering spindle and the steering shaft being formed by a torque-transmitting joint, and the steering column further comprising an axially movable swing element for axial length compensation, wherein the swing element comprises at least one coupling member with two parallel axes of rotation, a cross member is linked to the opposite end of the steering spindle to the steering wheel, and an axis of the cross member forms an axis of rotation of the coupling member.

With respect to the above, the invention solves the problem of obtaining a common point of intersection between the longitudinal axis of the steering shaft and the central axis of the coupling member irrespective of the angle of rotation of the steering column and the position of the steering shaft relative to the steering

spindle in order to avoid undesirable vibrations or feedback to the power-steering system.

According to the invention, this problem is solved by the fact that the steering shaft has a flange which ends at a distance from the longitudinal axis thereof and the flange pivots about the upper axis of rotation of the coupling member.

In their present form these novel features are not used with any known steering columns in order to solve the problem stated above and hence the subject matter of claim 1 also involves an inventive step.

The present application therefore satisfies the requirements of PCT Article 33(2) and (3) because the subject matter of the only independent claim, claim 1, is novel and inventive with respect to the prior art as defined in the PCT Regulations (PCT Rule 64.1 to 64.3).

2.3 Industrial applicability

The subject matter of claim 1 also seems to meet the requirements of PCT Article 33(4) because it would appear that it can be made and used at least in the field of motor vehicle technology.

2.1.4 Claims dependent on claim 1

Dependent claims 2 to 7, which concern further embodiments of the invention according to claim 1, likewise appear to satisfy the requirements of PCT Article 33(2) to (4).